BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Certificate in Land-based Studies Pearson BTEC International Level 3 Subsidiary Diploma in Land-based Studies Pearson BTEC International Level 3 Foundation Diploma in Agriculture Pearson BTEC International Level 3 Diploma in Agriculture Pearson BTEC International Level 3 Extended Diploma in Agriculture
Unit number and title	Unit 17: Crop Production
Learning aim(s)	**B** Establish and maintain healthy crops throughout the production cycle
Assignment title	**Supporting Profitable Production: A health check for two contrasting crops.**
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You are working as a trainee agronomist and have been asked to create an annotated visual *portfolio "Supporting Profitable Production"*, which will be displayed at an upcoming trade fair. The focus of the event is crop health, and your portfolio will be used to demonstrate to farmers the knowledge-base that the firm you work for has developed in identifying and remedying crop health issues in their production cycles. You have been asked to support your portfolio with a presentation relating to the maintenance of healthy crops and appropriate remedial actions taken when necessary. Your supporting presentation will need to show the farmers that your firm understands that any intervention needs to be proportional and appropriate. You will need to demonstrate your awareness of interventions in relation to both timing and cost effectiveness if you are going to convince farmers that they would benefit from employing your company's services in the future.
Task 1	Produce a portfolio of annotated photographs or illustrations. This will allow your audience to compare healthy crop photographs with those that show deficiencies and pest/disease issues at all stages of the growing season. Wherever possible you should use evidence from your own practical experience of crop establishment and maintenance in a range of locations and throughout the growing season. To accompany the portfolio you should produce a presentation to cover the production cycle of **two** contrasting crops. Remember that the information you provide is key to

	selling your firm's services, so it is critical that you use appropriate agricultural terminology throughout, and that your information is well-structured, considered and reasoned. The Portfolio. For **two** contrasting crops include the following annotated photographs and illustrations to support quick referencing for farmers at the trade fair: • the healthy crop at each growing stage • well-established crops • poorly-established crops • evidence of nutrient deficiencies • weed infestations • common pests • common diseases • remedial action being undertaken by yourself and others. The Presentation Your presentation must demonstrate that your firm fully recognises that poor crop establishment, and sub-optimal soil conditions, will impact on nutrient availability, plant health, and ultimately on yield for two contrasting crops. In your presentation: • explain suitable crop establishment systems, machinery, seed bed conditions, planting depth and seed soil content as well as available seed dressings • recommend actions to ensure that maintenance of health from establishment to harvest for each crop • justify specific recommendations regarding actions to maintain crop health. Remember to use different crop walk experiences to support your recommendations.
Checklist of evidence required	• A presentation examining the production cycles of two contrasting crops. • A supporting portfolio of evidence relating to the maintenance of healthy crops and appropriate remedial actions.

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
B.D2	Justify appropriate remedial actions taken to maintain the health of crops in given situations.
B.M2	Recommend actions to maintain healthy crops throughout the production cycles required to grow two contrasting crops.
B.P3	Explain the production cycles required to successfully grow two contrasting crops.
B.P4	Recognise general signs of health and deficiency symptoms in two contrasting crops.
B.P5	Suggest appropriate remedial action to maintain crop health.
Sources of information to support you with this Assignment	**Websites** gov.uk/guidance/fertiliser-recommendations-for-crops customers.hbci.com/~wenonah/min-def/part2.htm adlib.everysite.co.uk/resources/000/262/995/rb209-rev-100609.pdf publications.naturalengland.org.uk/search?q=nutrients&num=100 gov.uk/guidance/pests-and-diseases-in-combinable-crops **Books** Alford D.V. *Pest and Disease Management Handbook*. (Wiley & Sons 2000) ISBN: 978-0-632-05503-6 Ewing W. & Saunt K *The Crop Nutrition Directory* (Context Publications 2003) ISBN: 978 - 1899043064 Gratwick M. (ed) 2012. *Crop Pests in the UK: Collected Edition of MAFF Leaflets*. (Springer 20120) ISBN: 978 - 940146541 Naylor Robert E.I. (2002*) Weed Management Handbook* 9th Edition

Note to assessor:

Task 1, 2, 3 etc.	Evidence in the form of annotated notes and photographs from crop walks undertaken should form part of the evidence presented in the portfolio. Learners need to be supported to justify approaches to remedial action undertaken in given situations and so they should be encouraged to research and provide evidence from a range of site visits to enable them to apply the breadth of their knowledge in response to different situations that they have experienced.